

MISCELLANEA

FASCIOLA HEPATICA IN THE WILD RABBIT IN ENGLAND

On January 14th and 17th, 1925, Mr. J. Holroyd, F.R.C.V.S., of Blackburn, Lancs., sent me three rabbits, in the livers of which he had found flukes. The stomachs and intestines had been removed, so that only an inch or so of the rectum remained in each animal. The livers were greatly enlarged and contained 38, 33, and 22 adult flukes respectively. On being cleared, specimens of these were found to be morphologically similar to *Fasciola hepatica*. Coccidia and strongyle eggs were found in the faeces of each rabbit, and one had a small pisiform cysticercus in the abdominal cavity. Stock-owners often blame the rabbit for the spread of coccidiosis, tapeworm infestations, and strongylosis, especially in goats and sheep. The parasites of the rodent are, however, quite distinct from those of the ruminant, although it is a fact that both classes of animal are often seriously affected at the same time. Undoubtedly in such cases the climatic and other conditions have been favourable for the multiplication of parasites generally.

Although it is well known that the wild rabbit may harbour liver flukes, it is surprising how rarely one encounters them. A sportsman will forward rabbits which his keeper says are dying of fluke, but the autopsy will reveal a complete absence of them. Again, a zoological student may report 'all the rabbits with flukes in them,' and yet careful examination will reveal none. During the extensive outbreaks of liver fluke disease in sheep in recent years, one has rarely seen any reference to the rabbits in the same district, but it may be remarked that the rabbit is as a rule a lover of dry situations. The present cases are, therefore, not without interest. and curiously enough sheep have not had access to the land for over seven years, neither had the disease been recognised chronically in any of the farm animals in the surrounding district. There were appreciable losses in the rabbits early in 1924, and these increased considerably in January of 1925. Affected animals appeared to be confined to a particular belt of land, while on either side the rabbits seemed quite unaffected.

A. NOEL PILLERS.

28.12.25.

A NOTE ON *COENURUS SERIALIS*

On November 24th, 1925, an uninfected dog was fed with a number of sub-cutaneous cysts (*Coenurus serialis*) from a rabbit.

Eggs were first found in the faeces on January 24th, 1926. The dog was treated on January 27th and 143 fully developed worms were recovered. A notable feature was that in many instances the worms were sterile, no trace of a uterus being present.

T. SOUTHWELL.

AN OBSERVATION ON THE HATCHING OF A CESTODE EGG

It is sometimes stated that the liberation of a worm embryo, or larva, is affected by solution of the egg shell in the digestive juices of the host. Possibly this happens where the egg is provided with some special capsule or plug, and the shell is not homogeneous. The general rule, however, in Nematodes seems to be for the larva to rupture the egg-shell from within, and this may readily be seen to take place in Strongyloid eggs where the larva appears to strain forcibly against the shell.

In the case of Cestode eggs, recently, while watching the active boring movements of the hexacanth embryos in some eggs from a fresh, ripe segment of *Davainea cesticillus*, I observed one particularly vigorous embryo to tear its way first through the thin inner membrane, and afterwards through the shell of the egg, and so free itself altogether. Possibly this is what generally happens in cestode eggs, except where the embryo is enclosed in a specially developed embryophore.

E. L. TAYLOR.